

20. (Amended) The method of claim 3 further comprising providing a detector and a processor connected to the detector.

REMARKS

Claims 1-20 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Green et al. in view of Nickens et al.

Independent claims 1 and 3 have been amended to positively recite the scrubber system in combination with a semiconductor processing tool. The scrubber systems employed by Green and/or Nickens do not disclose or suggest systems suitable for use in the semiconductor industry where trace amounts of certain contaminants need to be removed from the gas flow through the system to reduce or eliminate these contaminants from wafer fabrication environments. The types of gases and the contaminants at a concentration occurring in tool environments has no resemblance to the processing conditions found in Green and Nickens and would not suggest their use in the semiconductor processing environment to one of ordinary skill in the art.

Claims 7-8, 10-11, 13-16 and 20 have been rejected under 35 U.S.C. 112, second paragraph. The claims have been amended to obviate the indicated rejections.

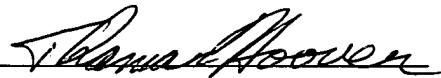
CONCLUSION

In view of the amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone call would expedite the prosecution of this case, the Examiner is invited to call the undersigned at (508) 416-2475.

Respectfully submitted,

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MARKED UP VERSION OF AMENDMENTSClaim Amendments Under 37 C.F.R. § 1.121(c)(1)(ii)

1. (Twice Amended) A continuous-operation scrubber system to remove contaminants in a gas in a semiconductor processing tool comprising:
 - a semiconductor processing tool;
 - a pair of channels connected in parallel to a supply line of [a]the semiconductor processing tool;
 - a scrubber coupled with each channel that removes a gas contaminant from each channel such that a scrubbed gas is delivered through the supply line to the semiconductor processing tool; and
 - a purge system coupled with each scrubber for purging the removed gas contaminant from [the]each scrubber.

3. (Twice Amended) A method for continuously scrubbing a gas in a semiconductor processing tool comprising the steps of:
 - delivering a gas to a scrubber system for a semiconductor processing tool including a first scrubber and a second scrubber connected in parallel;
 - directing the gas through the first scrubber;
 - purging the first scrubber while directing the gas through the second scrubber; and
 - purging the second scrubber while directing the gas through the first scrubber, the scrubbed gas from the first scrubber and the second scrubber being delivered to a semiconductor processing tool.

7. (Amended) The system of claim 1 further comprising a converter and a flow controller that selectively controls which of the scrubbing channels the gas can flow through to [a]the converter.

8. (Amended) The system of claim 7 further comprising a detector wherein the flow controller is governed by a control system that is programmed to transfer the flow

of a reference gas reaching [a]the detector from a scrubbing channel with a contaminated scrubber to a scrubbing channel with a purged scrubber and to then direct a purge gas through the contaminated scrubber.

10. (Amended) The system of claim 9[,] further comprising a primary channel wherein the control system is programmed to alternately transfer the flow of a gas between [a]the primary channel, where the gas comprises a target gas, and one of the scrubbing channels, where the gas comprises a reference gas.
11. (Amended) The system of claim 1 further comprising a detector and a pressure reducer located between [a]the detector and the scrubbers.
13. (Amended) The method of claim 3 further comprising purging the first scrubber to remove reversibly-bound basic nitrogen compounds while passing [the]a second reference gas through the second scrubber.
14. (Amended) The method of claim 3 further comprising passing a first reference gas and a second reference gas through a converter which converts gaseous nitrogen compounds in [the]first and second reference [gas]gases into an indicator gas after the first reference gas passes through the first scrubber and the second reference gas passes through the second scrubber. are passed through their respective scrubbers.]
15. (Amended) The method of claim 14 further comprising [directly]directing the first and second reference [gas]gases to a detector which detects a concentration of the indicator gas in the first or second reference gas after the said reference gas is passed through the converter.
20. (Amended) The method of claim 3 further comprising providing a detector and a processor connected to the detector.